

CLAIMS:

1. A method of growing commercially valuable trees to improve plant establishment, growth, crop production or quality, comprising the steps of:

- a) creating a hole in the earth;
- b) preparing the hole to influence the downward growth of the root system of a tree planted therein;
- c) at least partially filling the hole with a rooting medium;
- d) planting a tree in the at least partially filled hole;
- e) establishing and growing the tree by controlling root development and access to water and nutrients so that the root system of such tree grows within the hole, and becomes long and narrow;
- f) harvesting commercially valuable crops from the tree; and
- g) transporting the harvested commercially valuable crops for distribution.

2. The method of claim 1, wherein the step of preparing the hole includes the step of lining the walls of the hole with a material such that the root growth of the tree is maintained within the lined hole and is directed downward.

3. The method of claim 2, wherein the step of lining the walls of the hole with a material includes providing material which is substantially impervious to water and nutrients for root growth.

4. The method of claim 2, wherein the step of lining the walls of the hole with a material includes the step of lining the walls of the hole with a flexible or rigid casing made of such a material.

5. The method of claim 4, wherein the step of lining the walls of the hole with a flexible casing includes lining

the walls of the hole with a flexible casing that is self-sealing.

6. The method of claim 4, wherein the step of lining the walls of the hole with a flexible casing includes the step of spraying the material on the walls of the hole to provide the flexible casing.

7. The method of claim 4, wherein the step of lining the walls of the hole with a flexible casing includes the step of providing a disposable or biodegradable flexible casing.

8. The method of claim 4, wherein the step of lining the walls of the hole with a flexible casing includes the step of providing a permanent flexible casing.

9. The method of claim 4, further including the step of providing an additive in at least a portion of the walls of the hole to facilitate the creation of a seal between the flexible or rigid casing and soil outside of the hole.

10. The method of claim 2, wherein the step of lining the walls of the hole with a material includes the step of lining the walls of the hole with a rigid casing made of such a material.

11. The method of claim 10, further including the step of further lining the walls of the hole with a flexible casing made of a material which is substantially impervious to water and nutrients for root growth and is self-sealing such that the self-sealing material will seal tightly to the walls of the hole to inhibit the migration of water from the surface or near the surface to deeper levels, which might otherwise occur at the junction between the walls of the hole and the flexible casing.

12. The method of claim 10, further including the step of removing the hard casing at the time a tree is planted.

13. The method of claim 4, further including the step of providing a removable cartridge at least partially in the lined hole.

14. The method of claim 13, wherein the step of providing a removable cartridge includes the step of providing a rigid removable cartridge.

15. The method of claim 14, wherein the step of providing a rigid removable cartridge includes the step of providing a rigid removable cartridge comprising a plurality of units.

16. The method of claim 14, wherein the step of providing a rigid removable cartridge includes the step of providing a rigid removable cartridge comprising a plurality of interlocking units.

17. The method of claim 13, further including the step of at least partially filling the cartridge with a rooting medium.

18. The method of claim 4, wherein the step of planting a tree in the at least partially filled hole further includes the step of providing a removable cartridge of tree-root system and rooting medium at least partially in the lined hole, whereby the structure of the cartridge influences the root system of such tree to grow downward within the cartridge.

19. The method of claim 4, further including the step of covering the surface of the earth at the top of the hole in order to prevent service water from entering the hole.

20. The method of claim 4, further including the step of providing access tubing at least partially in the at least partially filled hole.

21. The method of claim 20, wherein the step of providing access tubing includes providing aeration tubing to allow air exchange between the surface and throughout the root zone of a tree planted therein.

22. The method of claim 20, wherein the step of providing the access tubing includes providing irrigation tubing to allow water to be administered throughout the root zone of a tree planted therein.

23. The method of claim 20, wherein the step of providing the access tubing includes providing fertilization tubing to allow fertilizer to be administered throughout the root zone of a tree planted therein.

24. The method of claim 20, wherein the step of providing the access tubing includes providing pesticide tubing to allow pesticides to be administered throughout the root zone of a tree planted therein.

25. The method of claim 4, further including the step of providing a berm-like structure at least partially in the at least partially filled hole.